FOR 404 URBAN FORESTRY SYLLABUS AND POLICY STATEMENTS, SPRING 2020

Instructor: Dr. David L. Kulhavy, Laurence C. Walker Distinguished Professor
Office: Forestry Building, Room 203f; Phone: Work - 468-2141
Office Hours: 8:00 am to 9:30 am and 4:30 pm to 5:00 pm Daily or By Appointment

Meeting Times: Lecture: MW 10:00 to 10:50 am, Room 225
Laboratory: Th 2-4:30, For. 219

Prerequisites: FOR 304: Arboriculture or Permission from the Instructor.

Course Description: 3 Credit Hours; Planning, establishment, protection, and management of individual trees and forest systems within an urban environment.

Course Objectives: The principles of urban forest management will be discussed in lecture. Laboratories early in the semester will introduce students to hazard assessment, condition assessment, valuation methods and street tree/park inventory methods. Guest lecturers representing city forestry will be scheduled during laboratory. Remaining laboratories will be dedicated towards the preparation of a comprehensive Urban Forest Management Plan for a city neighborhood TBD.

Program Learning Outcomes: FOR 404 is not a BSF core requirement course. FOR 404 is a required course for forestry students enrolled in the general forestry major with an emphasis in urban forestry.

The course shall meet the following BSF forestry learning outcomes:

1. Demonstrate understanding and competency of forest ecology and biology;
2. Demonstrate understanding and competency in the measurement of forest resources;
3. Demonstrate understanding and competency in managing forest resources;
4. Demonstrate understanding and competency of forest resource policy, economics, and administration.
5. Demonstrate understanding and competency in oral and written communication skills.

Items #1 - #4 above are required by the Society of American Foresters, the program’s accrediting agency.

<table>
<thead>
<tr>
<th>B.S. Forestry Program Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Proficiency Levels</strong></td>
</tr>
<tr>
<td><strong>Course</strong></td>
</tr>
<tr>
<td>FOR 404</td>
</tr>
</tbody>
</table>
1. A – Advanced – course supports Program Learning Outcome by providing students with transitional, high level topic-specific information, activities, and opportunities that enable the students to apply their critical thinking and tactical skills to resolved increasingly challenging strategic situations.

**Student Learning Outcomes:** Basic tree morphology and physiology will be reviewed (PLO1). Concepts and techniques in the diagnosis of individual trees exposed to abiotic and/or biotic stressors will be presented and practiced (PLO2). Methods to protect existing trees, and maintain and improve tree vigor will be discussed (PLO3). Knowledge of urban forestry as the foundation for developing and implementing sound urban forest management programs will be emphasized throughout the course; this will be coupled with the use of Geographic Information Systems in urban planning (PLO4). Professional ethics as it relates to the practice of urban forestry will be discussed (PLO4). Oral and written laboratory reports will be assigned to improve communication skills (PLO5).

**Course Goal:** Students will be introduced to planting methods, cultural practices and protection techniques for individual trees in an urban environment. Knowledge of the science of arboriculture is necessary to be effective in managing individual trees and forests in an urban setting. Students that successfully complete FOR 304 will have the background to understand concepts presented in FOR 404: Urban Forestry.

**Required Readings As Assigned**

**Lecture Topics:**

Tree Campus USA 10 %
History of Urban Forestry/Distribution and Ownership of the Urban Forest 5%
Functions and Values of the Urban Forest 5%
Urban Forest Environment 5%
Pictometry and Urban Forest Evaluation 5%
Tree Hazard Assessment and Management 5%
Street Tree Inventories and Valuation 5%
iTREE Design, iTREE Eco, iTREE Hydro 10%
AR.Parrot Drone Use in Forestry Evaluation 5%
Urban Forestry Field Trip, Houston, Texas 10%
The Urban Wildland Interface 5%
Street Tree and Park Management: Planting, Tree Maintenance, Removals 5%
Urban Forestry Ordinances 5%
State and Federal Urban Forestry Programs 5%
Volunteers, Education, Public Relations, NGOs 5%
Final project 10%

**General Course Policies:**

**Attendance:** Attendance is mandatory for lecture and laboratory. The student is responsible for making the instructor aware of an excused absence. Each unexcused
Absence will result in a final total point reduction of five percent. Refer to the SFASU Policy Manual on the SFASU web-site for more information.

**Assignments and Grades:** There are 650 points available in the course: 3, 100-point exams, a 300 point urban forest management plan, and a 50-point presentation. The Neighborhood Urban Forest Management Plan is worth 300 points. A Power-point presentation of the management plan is worth 50 points. For the plan and presentation due dates, refer to the Laboratory schedule below.

**Other Policies:** Cheating and Plagiarism - The severest penalty (an F for the course) will be applied to any student caught cheating or plagiarizing on an assignment. See the SFASU Policy Manual on the SFASU web-site for more information. Student Disability - Students seeking special accommodations for learning or physical disability must first self-identify with the Office of Disabled Student Services (ph. 468-3004). Accommodation requests must be discussed with the instructor.

**Laboratory Schedule**

Neighborhood Management Plan Team Assignments/Overview  
Tree Condition and Risk Assessment  
Tree Valuation – Trunk Formula Method 50 pts (10%)  
Victor Cordova, City Forester, Houston, TX  
Work on Neighborhood Management Plan  
Karen Stafford, TFS, Urban-Wildland Interface Management  

Mid-term Exam/Work on Neighborhood Management Plan 100 pts (20%)  
Gary Burns, Urban Forest Assessment, Policy, Liability  
Allen Smith, TFS, TFS Role in Urban Forest Emergency Management  
Work on Neighborhood Management Plan  
Work on Neighborhood Management Plan  
Work on Neighborhood Management Plan  
Neighborhood Management Plan Draft Reports Due  
Field Trip, Houston, Texas report 50 pts (10%)  

Second Exam/Neighborhood Management Plan Report Revisions 100 pts (20 %)  
Neighborhood Final Reports Due and Presentations 200 pts (40%)  

Total points: 500 (100%)

**Preparation of Urban Forest Management Plan:**  
Students will work to prepare a city neighborhood TBD. The inventory and GIS information for each team’s neighborhood will be provided. A handout will be provided that describes the data provided and the expectations of the management plan. There will be a required field trip to Houston, Texas, to examine Urban Forestry operations; this may be an overnight field trip and an excused absence roster will be forwarded.